

THREE DAYS ONLINE NATIONAL LEVEL TRAINING ON

# ANALYSING SOCIAL SCIENCE RESEARCH DATA USING PYTHON PROGRAMMING

Resource Person



Dr. Tina Dutta, Fellow IIM Calcutta Assistant Professor-Statistics Centre for Quantitative Economics and Data Science Birla Institute of Technology, MESRA, Ranchi

JANUARY 25-27, 2024 TIME: 6.30-8.30 PM

Organized By

VART Research, Mumbai, India

In Collaboration with

Department of Economics Mahapurusha Srimanta Sankaradeva Viswavidyalaya (MSSV) Nagaon, Assam

Registration deadline: 22nd Jan 2024

Registration Fees: INR 899/-

# Relevance of the Workshop:

The learnings can be effectively utilized in project/research work. The learnings are directly applicable to contemporary job roles in corporate/government/non-profit organizations in the field of data handling and analytics.

# **Nature of participants:**

Students/Researchers/Faculties/Professional

# Topic:

Day1: 25th Jan 2024

- Introduction to Python Programming
- Variables, Data Types, Operators
- String Manipulation, Lists & Dictionaries

Day2: 26th Jan 2024

- Function & Modules
- Uses of NumPy & Pandas

Day3: 27th Jan 2024

- Data Visualization using Matplotlib and Seaborn library
- Data Analytics using Python

## **WORKSHOP COORDINATORS**



**Dr. Jayanta Kumar Bora**Founding & Executive Director
VART Research, Mumbai, India



Dr. Biman Kumar Nath
Assistant Professor
Department of Economics
MSSV,Nagaon,Assam

#### SCAN ME FOR REGISTRATION



Registration link: https://forms.gle/wex1Vxuf5tuAyHVq5

## **CONTACT US**



+91 9310497037



inforvartindia@gmail.com



www.vartindia.com

#### **About VART**

The VART is a venture of the academic, social research and data science sector registered in 2019 under the Ministry of Corporate Affairs and Ministry of Micro, Small & Medium Enterprises (MSME), Govt of India. In 2021, VART was recognized as a "Startup" (#startupindia: DIPP84613) by the Department for Promotion of Industry and Internal Trade (DPIIT), Govt of India. VART's mission is to provide value-added training and research services to the client. We aim to skill the youths through various analytical and software training programs to strengthen the country's youth professionals. Our vision is to develop competitive and competent individuals in the research and analytical domain who will be assets for developing the research community in the country. Since inception, we have provided various capacity-building and soft skill development programs through hybrid mode to around 5000 participants which has empowered many students, M.Phil./Ph.D. scholars, academicians, individuals, and other researchers to upgrade their research skills. For details, please visit www.vartindia.com.

### **About the Department of Economics, MSSV**

Mahapurusha Srimanta Sankaradeva Viswavidyalaya (MSSV) was established by Srimanta Sankaradeva Sangha and formally founded on 10th June 2014 registered under UGC 2(f) and the Act of the Assam Legislative Assembly, 2013. Though the University has been set up under the Private University Act, it is designed as a people's university, an institution for the entire people of Assam as well as India. At present, the University is endowed with more than twelve hundred students including research scholars in four units located in Nagaon, Guwahati, Dhubri, and Jorhat of Assam. The Department of Economics came into existence in 2017 to produce quality professionals in the field of economics by providing a general understanding of the functioning of the economic system and the role of institutions, groups, and regions within that system and preparing the student for employment in industry, government, and self-employment. Presently, the department is located in the Nagaon unit of the university with thirty-two postgraduate students and sixteen Ph.D. scholars. The department offers MA and Ph.D. in Economics having specialization in Human development, climate change, environmental economics, agriculture economics, and econometrics. For details, please visit www.mssv.ac.in.

## **Workshop Overview**

Python is a very powerful open-source programming language widely used for quantitative and qualitative analyses and other general-purpose coding. In the era of digital data, coding, and analytics, students/practitioners of different disciplines must know basic coding to venture into the dynamic world of data-driven decision-making. The present workshop is designed for non-programmers to introduce them to the basics of coding and train them to use some of the important modules and libraries of Python that are used to describe, visually represent, and quantitatively analyze social science research data. This workshop will further help the participants to undertake advanced-level coding courses in the future.

#### The expected outcome of the workshop

After completion of this workshop, the participants are expected to:

- Apply to code and write programs in Python
- Apply different in-built modules such as math, random, and Regular Expressions for computation and analysis purposes
- · Apply different data analysis modules such as NumPy, and Pandas for exploring and analyzing data
- Analyze data using various visual representations and descriptive measures

#### ABOUT RESOURCE PERSON

Dr. Tina Dutta is an Assistant Professor at the Centre for Quantitative Economics and Data Science, Birla Institute of Technology, Mesra, Ranchi, Jharkhand. By academic training, she is a statistician, a demographer, and a social science researcher. She is a Fellow (Ph.D.) from the Indian Institute of Management Calcutta, M.Phil in Population Studies from the International Institute for Population Sciences, Mumbai, and a Master in Statistics from Banaras Hindu University. She is UGC-NET-JRF qualified.

Dr. Tina has been actively involved in teaching, training, and curriculum development of subjects such as Business Statistics, Quantitative techniques, Linear Statistical Models and Regression Analysis, Business Analytics, Econometrics, Time-series modeling and forecasting, Research Methodology, Data Science using Python, Data Analytics using Power BI, Operation Research, Value added courses on SPSS, and STATA. She is equally vibrant in research in the area of labour migration, gender, public health, and mathematical demography. She has research publications in ABDC and UGC CARE journals; and book chapters in Sage and Routledge publications. She has been also contributing to various Faculty Development Programmes and student-level workshops primarily in the area of data visualization and analytics using various software.

She has attended numerous FDPs and workshops, such as FDP on "Machine Learning" at IIM Bangalore, "Case Method Workshop" at IIM Calcutta, "NVIVO for Qualitative Research" at IIM Calcutta, "Summer School on Econometrics" at IIM Calcutta, "Summer School on Migration Studies" at European University Institute (Italy) and Workshop on "Emerging Areas in Applied Statistics" at Indian Statistical Institute, Kolkata.